

What's New from the DAAC Alliance



For information about the member centers of the Distributed Active Archive Center (DAAC) Alliance and their data products and services, see the DAAC Alliance Web site at <http://nasadaacs.eos.nasa.gov>.

ASF DAAC

Alaska SAR Facility

<http://www.asf.alaska.edu>

Synthetic Aperture Radar (SAR) Products and Polar Regions

RGPS Winter Data

ASF, via the RADARSAT Geophysical Processor System (RGPS), has completed processing sea ice data for the 1998–99 winter season. The processed data include the portion of the Arctic Basin within the ASF station mask, and are available at <http://www.gi.alaska.edu/~rgps/>. Also available are data for winter 1996–97 (ASF mask only), winter 1997–98 (entire Arctic Basin), and summer 1998 (ASF mask only), as well as seasonal ice zone data for January to May 1998.

RADARSAT-1 Fine-Resolution Data

RADARSAT-1 Fine Beam 1 data are now available to all ASF-approved users as full- and low-resolution or complex processed data. Archived data may be ordered via the EOS Data Gateway at <http://imswelcome.asf.alaska.edu:8000/~imswwww/pub/imswelcome/>. For more information, contact User Services at uso@asf.alaska.edu or (907) 474-6166.

EDC DAAC

Earth Resources Observation Systems (EROS) Data Center

<http://edcdaac.usgs.gov>

Land Processes

Data

EarthSat Geocover Orthorectified Landsat TM Imagery

NASA's Commercial Remote Sensing Program compiled quality-screened, high-resolution satellite images with global coverage over Earth's land masses. The data set contains orthorectified thematic mapper (TM) data from Landsat 4 and 5 satellites. The collection contains only those images that most closely met specific criteria, including acquisition date, cloud percentage, data quality parameters, and best-available phenology. Approximately 8,500 images were selected for insertion into the archive upon release. The cost is \$60 for each CD-ROM (one granule per CD) and \$50 per granule by FTP. Shipping and/or handling fees apply. See http://edcdaac.usgs.gov/nsdp/earthsat_overview.html.

ASTER and MODIS Data Products

New data products continue to be available from the Advanced Spaceborne Thermal Emission and Reflection

Radiometer (ASTER) and the Moderate Resolution Imaging Spectroradiometer (MODIS) sensors. For ASTER products, see <http://edcdaac.usgs.gov/aster/asterdataprod.html>.

MODIS "Provisional" products (Version 003) are now available. Based on multilevel processing refinements, the V003 data accommodate instrument and calibration stabilization. V003 products contain a continuous year of data with consistent science quality. Note that although V003 will eventually replace the "Beta" products (V001), both will be available for at least 6 months following V003 production of any data granule. MODIS 250-meter data will be available as V003 only. For more information, see <http://edcdaac.usgs.gov/modis/dataproduct.html>.

Tools

MODIS Reprojection Tool (MRT)

The EDC DAAC has sponsored the South Dakota School of Mines and Technology in developing the MRT. This tool was designed to reproject 2-D gridded Level 3 MODIS products, originally produced in the Integerized Sinusoidal (ISIN) projection. The initial version of this software enables users to read data files in Hierarchical Data Format for EOS (HDF-EOS) format, offers spectral and spatial subsetting, performs geographic transformation to a different coordinate system/cartographic projection, writes the output to file formats other than HDF-EOS, and is executable on UNIX (Sun, SGI), Windows (9x, NT), and Linux systems. See <http://edc.usgs.gov/programs/sddm/modisdist/>.

GHRC

Global Hydrology Resource Center

<http://ghrc.msfc.nasa.gov/>

Global Hydrology

CAMEX-4 Data

The Fourth Convection and Moisture Experiment (CAMEX-4) was conducted from the Naval Air Station Jacksonville, Florida, from August 15 through September 24, 2001. Various instruments from ground-, aircraft-, and space-based platforms provided data used to study tropical storms, hurricanes, and various synoptic-scale phenomena. The data are to be archived at the GHRC. Some data have been obtained and more are expected in the next few months.

For information on the status of CAMEX-4 data products, see http://camex.msfc.nasa.gov/camex4/dataset_availability.html/. The GHRC makes new data products available each week. Please check the status of GHRC's data holdings frequently.

LIS and ODT Data Products

The GHRC offers four new climatologies based on data from the spaceborne Lightning Instrument Sensor (LIS) and the Orbital Transient Detector (OTD).

- ➔ LIS/OTD 0.5-Degree High-Resolution Full Climatology
- ➔ LIS/OTD 2.5-Degree Low-Resolution Annual Climatology
- ➔ LIS/OTD 2.5-Degree Low-Resolution Diurnal Climatology
- ➔ LIS/OTD 2.5-Degree Low-Resolution Full Climatology

All data are available in HDF and can be ordered directly from the GHRC via HyDRO at <http://ghrc.msfc.nasa.gov>.

GSFC DAAC

Goddard Space Flight Center

<http://daac.gsfc.nasa.gov>

Upper Atmosphere, Atmospheric Dynamics, Global Precipitation, Global Biosphere, Ocean Color

Data

TRMM Satellite Operating Altitude Change

The National Space Development Agency (NASDA) of Japan and NASA management approved a Tropical Rainfall Measuring Mission (TRMM) Project decision to change TRMM's average operating altitude from 350 km to 403 km. This change will significantly extend the TRMM mission's lifetime. The maneuver began August 7, 2001, and the final main satellite maneuver was completed August 24, 2001, bringing TRMM to the targeted final operating altitude of 403 km. All post-boost data products have been released by the TRMM Science Project, as of early December 2001. All TRMM data products (post- and pre-boost) are available through the TRMM data search-and-order system at <http://lake.nascom.nasa.gov/data/dataset/TRMM/index.html>. Some caveats associated with post-boost TRMM precipitation radar (PR) products have been released by the PR algorithm scientists and are available from ftp://lake.nascom.nasa.gov/data/TRMM/Documentation/TRMM_Boost_PR_Caveats.html.

MODIS Data

Significant improvements have been made in the majority of previously released MODIS Beta data products (Version 001). As a result of these improvements, the MODIS Provisional products (Version 003) are now available. More information can be found at http://daac.gsfc.nasa.gov/CAMPAIGN_DOCS/MODIS/index.shtml.

Tools and Services

Several new MODIS functionalities have been added to the Goddard search-and-order interface, known as WHOM. For the MODIS portion of this interface, please access <http://acdix.gsfc.nasa.gov/data/dataset/MODIS>.

The following MODIS functionalities are now available:

- ➔ Attribute filtering
 - Users can see spatial coverage by filtering granules by attributes of quality, cloud coverage percentage, day/night.
 - Filtering by day/night flag only has been implemented.
- ➔ Ocean Level 3 parameter “subsetting”
 - Users can search and order granules containing only those parameters they need instead of ordering all parameters for a given Ocean multigranule ESDT.
 - Currently implemented for mapped products only.
- ➔ On-demand channel/band subsetting
 - Users can request only the parameters or bands they need from all parameter/bands bundled together in a single granule.
 - Currently implemented for Level 1B (1 km) only.

JPL DAAC

Jet Propulsion Laboratory

<http://podaac.jpl.nasa.gov>

Physical Oceanography

Data

AVHRR Gridded 18-km MCSST Level 3 (NAVOCEANO)

This product has interpolated weekly, 18-km, uniform sea surface temperature (SST) grids computed at JPL PO.DAAC from the alongtrack AVHRR Multi-Channel Sea Surface Temperature (MCSST) data provided by the Naval Oceanographic Office (NAVOCEANO) at near real time (a few hours lag). NAVOCEANO's improved cloud detection algorithms yield more retrievals than previous MCSST data sets.

The weekly maps are available at a 1-week lag, in a binary format that can be converted to SSTs using a simple bias and scale conversion. In addition to these weekly 18-km maps, the alongtrack 9-km data are also available.

Read software is supplied as IDL, C, and Fortran codes. Data are available from August 29, 2001, to present. A new browse tool is also available for this data set. For information and FTP access, see <http://podaac.jpl.nasa.gov/navoceanomcsst/>.

MODIS Global Level 3 Mapped Mid-IR and Thermal IR SST

The PO.DAAC is now mirroring MODIS Level 3 SST data products from the GSFC DAAC. The mirrored products include the thermal infrared (IR) and mid-IR SST maps, and related statistical, quality, and metadata files and information. The data are mapped to a cylindrical equidistant map projection with 4.63-km spatial bins, and 1-day or 8-day averages. The file format for all data is HDF-EOS. The mean SST and the coincident quality, flag, and statistical information are in separate files. Currently, the MODIS data are available only via FTP in a GZIP compressed format. For more information, see <http://podaac.jpl.nasa.gov/modis/>.

Tools

PO.DAAC Ocean ESIP Tool (POET)

This service provides online subsetting and visualization of selected data holdings. Data subsets are requested from a standard Web-browser interface. The output is returned to the user's browser in the form of a latitude-longitude map, animation, time-series graph, or space-time profile. Other options include ASCII output, customized plots, and choice of additional output formats including image (GIF, PNG, JPEG), scientific (netCDF), GIS (GeoTIFF, ArcGrid), and binary (UNIX or PC). This graphical user interface was developed by the Ocean ESIP (Earth Science Information Partner). For access, see <http://podaac-esip.jpl.nasa.gov/gui>.

LaRC DAAC

Langley Research Center

<http://eosweb.larc.nasa.gov>

Radiation Budget, Clouds, Aerosols, and Tropospheric Chemistry

Terra Data

The Atmospheric Sciences Data Center supports three projects from the EOS Terra mission: the Measurements Of Pollution In The Troposphere (MOPITT), the Clouds and Earth's Radiant Energy System (CERES), and the Multi-angle Imaging SpectroRadiometer (MISR).

The MISR Level 2 TOA/Cloud Albedo data product contains local albedo values. The MISR Level 2 TOA/Cloud Classifiers data product contains altitude-binned cloud classifications and angular cloud fractions.

TRMM Data

CERES Monthly Gridded TOA/Surface Fluxes and Clouds (SFC) data from TRMM contain 1 month of CERES data for a single-scanner instrument.

Coincident Data DVD

The DVD contains coincident data products from the MISR, AirMISR, and CERES instruments. Sample images of the Typhoon Pabuk, Eastern Mediterranean, and South African Fire-Atmosphere Research Initiative (SAFARI) 2000 are included.

CLAMS Data

CERES ERBE-like Instantaneous TOA Estimates (ES-8) data from the Chesapeake Lighthouse and Aircraft Measurements for Satellites (CLAMS) field campaign contain 24 hours of data for a single-scanner instrument.

ISCCP Data

International Satellite Cloud Climatology Project D Series data (D1, D2, and DX) for 1994 through 1998 are now available in native format.

Nimbus-7 Data

Total Solar Irradiance data collected by Nimbus-7 Earth Radiation Budget (ERB) are available for November 16, 1978 through December 13, 1993.

NSIDC DAAC

National Snow and Ice Data Center

<http://nsidc.org>

Snow and Ice, Cryosphere and Climate

Data

New Version of RAMP DEM

Version 2 of the high-resolution Radarsat Antarctic Mapping Project (RAMP) Digital Elevation Model (DEM) is now available. This improved DEM combines topographic data from a variety of sources to provide consistent coverage of the entire Antarctic continent, and has potentially broad applicability to studies of ice sheet morphology and ice dynamics. The 1-km, 400-m, and 200-m resolution DEM data can be downloaded via the RAMP DEM catalog page at <http://nsidc.org/data/nsidc-0082.html>.

NSIDC Unveils Revamped Web Site

For improved access to online information, NSIDC released its redesigned Web site. A navigation bar includes links to NSIDC data, projects, research, the cryosphere (which replaced the education section), and a site map. The new home page provides access to NSIDC's new searchable data catalog, publications, gallery, and coldlinks (NSIDC's list of snow- and ice-related links). See <http://nsidc.org/>.

NSIDC's new Web site also includes an updated version of the "All About Snow" page that features common questions and answers about snow, interesting snow facts, a snow glossary, a new gallery, and links to other snow topics on the Web. Please visit <http://nsidc.org/snow/>.

Snow Melt Onset Over Arctic Sea Ice

NSIDC recently released a compilation of yearly snow melt onset dates over arctic sea ice, derived from the Scanning Multichannel Microwave Radiometer (SMMR) and Special Sensor Microwave/Imager (SSM/I) brightness temperatures. This data set provides a new proxy for climate in arctic sea ice zones. Microwave emissivity of snow increases dramatically as snow melts and liquid water appears. Snow melt onset is defined as the point in time when microwave brightness temperatures of the snowpack increase sharply. Snow melt onset data currently span 1979 through 1998, and are in a polar stereographic grid at 25-km resolution. The tab-delimited ASCII files and GIF images are available via FTP from <http://nsidc.org/data/nsidc-0105.html>.

Tools

HDF-EOS Tools and Information

NSIDC created a series of Web pages that address the complexity of HDF-EOS files, including MODIS snow and sea ice products. This site provides simple instructions and tools for extracting HDF-EOS objects and writing them to ASCII or flat binary formats. The site also summarizes the methods for utilizing existing geolocation information. See <http://nsidc.org/hdfeos/>.

ORNL DAAC

Oak Ridge National Laboratory

<http://www.daac.ornl.gov>

Biogeochemical Dynamics, Terrestrial Ecology

BOREAS Follow-On

The ORNL DAAC has released 26 data sets from the Boreal Ecosystem-Atmosphere Study (BOREAS) Follow-On project. The project extended data collection activities at selected BOREAS field facilities, reprocessed BOREAS data for follow-on modeling tasks, and continued derivation of land surface products from several remote-sensing data sources.

Global Climate Data in GIS Formats

Version 2.1 of “Global 30-Year Mean Monthly Climatology, 1930–1960 (Cramer and Leemans)” has been released in ASCII GRID format and binary format, especially suitable for GIS users. The data set contains monthly averages of mean temperature, temperature range, precipitation, rain days, and sunshine hours for the terrestrial surface of the globe. It is gridded at a 0.5-degree longitude/latitude resolution. See http://www.daac.ornl.gov/daacpages/climate_collections.html.

Global Soil Respiration Data

The ORNL DAAC now holds global annual soil respiration data. J. W. Raich and W. H. Schlesinger compiled the data set, using soil respiration rates from sites in terrestrial and wetland ecosystems as reported in scientific literature before 1992. See http://www.daac.ornl.gov/daacpages/soils_collections.html.

VEMAP

Data from Phase 2 of the Vegetation/Ecosystem Modeling and Analysis Project are available: “VEMAP 2: U.S. Daily Climate, 1895–1993” and “VEMAP 2: U.S. Daily Climate Change Scenarios,” which extends from January 1895 to December 2100. In addition, “VEMAP 1: U.S. Soil” has been revised. See <http://www.daac.ornl.gov/VEMAP/vemap.html>.

SAFARI 2000

Data from the Southern African Regional Science Initiative are online: “SAFARI 2000 Monthly Climatology for the 20th Century (New et al.),” “SAFARI 2000 SeaWiFS Images for Core Study Sites, 2000–2001,” and “SAFARI 2000 SeaWiFS Images for Southern African Region, 1999–2001.” Volume 1 of the SAFARI 2000 CD-ROM series is also available. See <http://www.daac.ornl.gov/S2K/safari.html>.

Vegetation Leaf Area Index (LAI)

A global data set containing approximately 1000 estimates of LAI for a variety of biomes and land cover types has been released. The data set contains previously published estimates of LAI for more than 450 field sites worldwide, with the earliest values from 1932. A bibliography of 300+ data sources is also available.

Flux Data

The ORNL DAAC offers more than 100 years of gap-filled flux and meteorology data for 14 European sites and 17 sites

in North and South America. Measurements of fluxes of carbon dioxide, water vapor, and energy exchange at representative sites in Europe are also available. See <http://www.daac.ornl.gov/FLUXNET/fluxnet.html>.

Large-Scale Biosphere Atmosphere Experiment in Amazonia (LBA)

A CD-ROM set entitled “JERS-1 SAR Global Rain Forest Mapping Project: South America (Amazon Basin), 1995–1996, Vol. AM-1” is available.

SEDAC

Socioeconomic Data and Applications Center

<http://sedac.ciesin.columbia.edu>

Human Interactions in the Environment

Data

LandScan 2000

The LandScan 2000 data set is a worldwide population database compiled on a 30-arc-second latitude/longitude grid. Census counts (mainly at subnational level) were apportioned to each grid cell based on probability coefficients, which are based on proximity to roads, slope, land cover, and nighttime lights. LandScan 2000 was developed as part of the ORNL's Global Population Project for estimating ambient populations at risk. LandScan files are available from SEDAC in Band Interleaved by Line (BIL) format by continent and in ESRI-grid format for the world. Access the data files (after user registration) through the data links. See <http://sedac.ciesin.columbia.edu/plue/gpw/landscan/>.

Online Services

2002 Environmental Sustainability Index (ESI)

The ESI is a measure of overall progress towards environmental sustainability, developed for 142 countries. ESI scores are based on a set of 20 core “indicators,” each of which combines 2 to 8 variables for a total of 68 underlying variables. The ESI allows cross-national comparisons of environmental progress in a systematic and quantitative fashion. It assists the move toward a more analytically rigorous, data-driven approach to environmental decision-making. See <http://www.ciesin.columbia.edu/indicators/ESI/>.

Open Meeting of the Human Dimensions of Global Environmental Change Research Community Papers

The meeting was held in Rio de Janeiro, Brazil, October 6–8, 2001. The papers, which are available on the Open Meeting Website, address the major conference issues, such as “urban sustainability,” “vulnerability,” and “poverty and the environment.” Other topics covered include land use and land cover change, energy, sustainable development, integrated assessment, population and the environment, environment and health, and the science-policy interface. See <http://sedac.ciesin.columbia.edu/openmeeting/>.